CLAIMS

What is claimed is:

1. A portable, multipurpose, air dispensing apparatus comprising:

a small, portable canister of a linearly elongated, cylindrical, hollow configuration, said canister holding a combination of compressed oxygen and nitrogen;

a regulator, said regulator located on the top of said canister, and said regulator having a valve housing disposed within said regulator;

a mouthpiece, said mouthpiece located above said regulator, and designed for the user to place his or her mouth over said mouthpiece;

an activation button, said activation button located on the top of said regulator; said activation button designed to be depressed, and with each depression, to release the equivalent of one breath of the pure oxygen/nitrogen through said mouthpiece and into said mouth of the user; and

canister securing means, said canister securing means designed to releasably secure said canister to an appendage of a user.

a constant volume discharge valve, said constant volume discharge valve located inside said valve housing of said regulator.

2. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said canister holds enough gas for approximately 15-90 average breaths, depending on canister size and PSI rating.

3. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said regulator further comprises a constant volume discharge valve, said constant volume discharge valve releasing a preset amount of air equivalent to one human breathe, each time said activation button is depressed.

4. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said present invention is configured and designed to be held and activated by one hand, with the thumb depressing said activation button.

5.. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said regulator further comprises:

a female inlet and female threads, located on the bottom of said regulator, said female threads designed to mate with male threads located on said top of said canister, thereby making said canister detachable from said regulator; and

sealing means, said sealing means designed to ensure an air tight seal

between said regulator and said canister.

6. The portable, multipurpose, air dispensing apparatus of Claim 5, wherein said canister is designed to be replaced when depleted.

7. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said canister, mouthpiece and regulator are sufficiently small so as to be portable, capable of easy grasping, holding and activation with one hand, and capable of being carried in a pocket.

8. The portable, multipurpose, air dispensing apparatus of claim 7, wherein said canister is 1 inch in radial diameter, and 3 and ½ inches in height.

9. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said canister securing means further comprises;

an adjustable arm wrap, of a generally rectangular configuration, said arm wrap being constructed of a strong, lightweight, elastic material, and designed to be wrapped around an appendage of the user;

a non-slip surface, said non-slip surface located on the interior surface of

said arm wrap, said arm wrap adapted to rest against the user's skin;

a canister pouch, said canister pouch located on the exterior surface of said arm wrap, and configured and sized so as to snugly hold said canister within itself through an opening in said canister pouch; and

flap securement means, said flap securement means releasably secures said flap to said exterior surface of said canister pouch.

10. The portable, multipurpose, air dispensing apparatus of Claim 9, wherein said flap securement means is a hook and loop fastener.

11. The portable, multipurpose, air dispensing apparatus of Claim 9, wherein said flap securement means is a snap fastener.

12. The portable, multipurpose, air dispensing apparatus of Claim 9, wherein when said canister is in said canister pouch and said canister pouch secured to the user's arm, the elongated centerline of said canister is parallel to the elongated centerline of said arm, so as to facilitate easy grasping by the opposite arm when needed.

13. The portable, multipurpose, air dispensing apparatus of Claim 9, wherein said canister pouch does not completely cover said canister once inserted, so that when said flap is released, said canister can be easily grasped by a top of said canister.

14. The portable, multipurpose, air dispensing apparatus of Claim 9, wherein said arm wrap is constructed of neoprene.

15. The portable, multipurpose, air dispensing apparatus of Claim 9, wherein said canister is releasably secured to said exterior surface of said arm wrap via said flap and flap securement means.

16. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said mouthpiece and regulator are permanently affixed to said canister.

17. The portable, multipurpose, air dispensing apparatus described in Claim 1, wherein said constant volume discharge valve comprises:

a threaded shank, said threaded shank for capturing a piston, and said

threaded shank being threadably received in said valve housing; wherein said piston having a supple and sealing seat member engaging an annular seat; and

a ball, said ball for engaging a hard metal seat for providing a pressure control means, said ball being biased in a closed position by internal pressure of said canister and a resilient spring, and said hard metal seat for preventing a sealing seat from being achieved.

18. The portable, multipurpose, air dispensing apparatus described in Claim 17, wherein said ball is lifted from said hard metal seat by a metal pin being resiliently biased through a valve arm and a resilient coil spring as supply pressure of the oxygen nitrogen mixture decreases, wherein said valve arm functions as a pressure regulator for maintaining a substantially constant pressure within a chamber.

19 The portable, multipurpose, air dispensing apparatus described in Claim 18, wherein said valve arm has a fixed diameter orifice passageway communicating from said chamber to an outer chamber for providing open communication through a conduit and a flexible tube to a puncture stem, said valve arm being actuated by a lever arm resting above a pivot mound.

20. The portable, multipurpose, air dispensing apparatus described in Claim 19, wherein said lever arm being coupled at one end of said valve arm and at an opposite end to a lower surface of said activation button, said lever arm pivoting about said mound to lift said lever arm for releasing a preset amount of oxygen nitrogen mixture after pressure is exerted on said activation button.